d) a viscosity-reducing amount up to 50 % by weight, solids basis, of an unhydrolyzed epoxy-functional alkoxy silane.

18. (once amended) The coating composition of claim 17 wherein said acrylic monomer has an acrylic functionality not greater than two.

Remarks

Claims 1-17 were previously pending, and have been renumbered as claims 1-18 in order to correct the duplicate use of claim 11. In turn, the dependency of renumbered claim 18 (original claim 17) has been amended as well. Claim 1 has been amended in the manner described below, antecedent basis therefore existing throughout the application.

The rejection under Section 112, second paragraph, is respectfully traversed. Applicants propose that the terms "hydrolysis product ... alkoxysilane" and "unhydrolyzed ....alkoxysilane", are both clear and proper under the circumstances. A preferred composition of the present invention affirmatively includes both hydrolyzed and unhydrolyzed epoxy-functional alkoxy silanes. As described in the specification, the affirmative inclusion of the unhydrolyzed silane provides a variety of advantages, e.g., by permitting the preparation of a solvent free system. The Examiner's concerns regarding a "partially" hydrolyzed compound would appear to be rendered moot.

The rejections under Section 103(a) are respectfully traversed. The present claims provide, *inter alia*, a composition that includes both hydrolyzed and unhydrolyzed epoxy-functional alkoxy silanes, with the latter being present in an amount sufficient to reduce the viscosity of the composition itself. The current claims further confirm the manner in which a curing agent (to polymerize the epoxy compounds) is included in combination with a photoinitiator (to polymerize the ethylenically unsaturated groups). Hence the composition can be, and typically is, light cured under conditions suitable to activate both the curing agent and the photoinitiator. Antecedent basis for the amendment exists throughout the specification, e.g., at pages 6-7 (with respect to cationic initiators) and at pages 8-9 (with respect to photoinitiators).

By contrast, Funaki et al. merely relates to a coating composition having an epoxy-group containing organic silane compound and a polyhydric alcohol, and as such fails to describe or suggest the array of features presently claimed. At the outset, Funaki et al. fail to describe the inclusion of unhydrolyzed silanes in the manner, or for the purpose, presently claimed. The reference also fails to teach or suggest the polymerization of monomers in the manner presently provided, and instead in concerned only with the use of already formed polymers.

The rejection under Section 103 over Morrison or Tarshiani et al, in view of Perkins et al. is respectfully traversed. Neither Morrison nor Tarshiani et al., either alone or in any suitable combination, teach or suggest the various attributes of Applicant's composition as present

claimed, including the ability to cure both epoxy compounds and monomers, and the affirmative addition of unhydrolzyed silane compound in a manner sufficient to provide improved viscosity.

Morrison describes an epoxy silane, an amine hardener for the epoxy silane, and a stabilizer. The reference includes reference to the *optional* use of "aqueous prehydrolysis products" of the epoxy silanes. Morrison therefore fails to teach or suggest either the inclusion of unhydrolyzed silane in the manner presently claimed, or the ability to light cure the system, let alone the inclusion and polymerization of monomers.

Tarshiani et al., in turn, describe a radiation-curable composition that includes, in relevant part, a "hydrolysable" alkylalkoxysilane and a photoinitiator capable of initiating cationic cure of the resultant composition. This reference also fails to teach or suggest the affirmative inclusion of an unhydrolyzed silane component, or the polymerization of monomers in combination with the epoxy cure.

As discussed in Applicant's own specification, Perkins et al. merely describes a coating composition containing a polyfunctional, polymerizable non-acrylate functional ether, an initiator, and colloidal silica, and hence fails to remedy the defects described above with respect to the primary references of Morrison and Tarshiani et al. In particular, Perkins et al. fails to teach or suggest the affirmative inclusion of an unhydrolyzed silane component, particularly for the purposes presently claimed.

In view of the above remarks, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of all rejections is respectfully requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Amendments to the claims (where insertions are underlined and deletions placed in brackets):

1. (once amended) A coating composition for forming a transparent, abrasion-resistant coating upon a substrate, comprising:

a) the hydrolysis product of an epoxy-functional alkoxy silane [and],

b) a curing agent [therefore] for polymerizing epoxy compounds, the curing agent comprising a cationic initiator,

c) an ethylenically unsaturated monomer and photoactivated free-radical initiator therefore, and

d) a viscosity-reducing amount up to 50 % by weight, solids basis, of an unhydrolyzed epoxy-functional alkoxy silane.

18. (once amended) The coating composition of claim [16] 17 wherein said acrylic monomer has an acrylic functionality not greater than two.